

METHOD AND APPARATUS FOR FABRICATING
A SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

5 The present invention relates to a method and apparatus for depositing a metal
layer inducing crystallization of an amorphous silicon layer in order to fabricate a
semiconductor device including a crystalline active layer. Since the metal layer
inducing a low temperature crystallization of silicon is deposited while heating the
substrate, the metal layer contacting the amorphous silicon forms a metal silicide
10 during the deposition process and the other portions of the metal layer remain in the
state of metal. Thus, the non-silicide portion of the metal layer may be selectively
removed after deposition and the silicide portion of the metal layer has a high
resistance against oxidation.

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